2: Jochelson E-5 (1884-1902) 1933 Yakut

ANTHROPOLOGY

141
144

Measurements and observations of the Yakut physical type have been made by Middendorff, Maak, Hecker, Mainov, Vitashevsky, Kon, Sipovich, Sieroszevski, and Mrs. Jochelson. Middendorff's measurements of the Yakut were lost when his boat capsized on Taimyr Lake, and consequently, he published only a description of the Yakut type. All the Yakut, he states, are dark skinned and black haired. However, every observer distinguished two distinct types: one closely akin to the European, while the broad, flat face of the other is manifestly Mongoloid.[1] German scientists of the middle of the nineteenth century believed the Turkic race to be distinct from the Mongoloid. In accordance with this concept, Middendorff explained this difference by ascribing it to the Tungus influence, which he regards as purely Mongolian. Middendorff contended that in the posterity of peoples of mixed origin the physical type of either the father or the mother is reproduced. He argued, therefore, that among the Yakut we find either representatives of a pure Turkic, or a genuine Mongoloid type, i.e., Tungus.

R. Maak adhered to the same theory. Referring to the Viliui Yakut, he states:—

"Some faces show a true Mongolian type which may bear testimony of a mixture wtih Tungus" and further, "Among the Yakut are found Tungusian, i.e., Mongolian types, and, on the other hand, we meet Yakut types, i.e., Turko-Tatarian, among the Tungus."[2]

According to Boas,[3] two theories of heredity are held: one that the characteristics of the parents are blended in the children; the other, that the laws of heredity act in such a way that for certain traits, the type of either the father or the mother, or that of a more remote ancestor, is reproduced. An inquiry into the value of the cephalic index has shown clearly that in intermarriages within the same race the laws of alternating heredity are fulfilled. Children do not form a blend between their parents, but revert either to one type or the other.

These conclusions of Professor Boas and others are only partially applicable to the Yakut. In the discussion of the Yakut language we shall see that their linguistic position is somewhat contradictory to their somatological situation. While the Yakut language, with all its peculiarities, undoubtedly belongs to the Turkic stock, the question of their origin is

---

[1]Von Middendorff, A. Theodore, Reise in den äussersten Norden und Osten Sibiriens während der Jahre 1843 and 1844 mit allerhöchster Genehmigung auf Veranstaltung der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg ausgeführt. St. Petersburg. 1847. 3 vols.

[2]Maak, R., *The Viliuisk District of Yakutsk Province.* St. Petersburg. 1887. (In Russian).

[3]Boas, Franz, Changes in the Bodily Form of Descendants of Immigrants (*Reprinted from the Reports of the United States Immigration Commission*, New York, 1912), 77.

2: Jochelson E-5 (1884-1902) 1933 Yakut

more complicated. Recent investigators of peoples speaking Turkic dialects have discovered their extensive blood mixture with peoples of different ethnical origin. The war-like Turkic nomads spreading over a vast territory during millenia, came in contact or blended with different racial elements: in Central and Southern Asia with Iranians and Semites; in the west, with Caucasians and Mediterraneans; somewhat to the north of the latter, with Slavs; to the northwest, with Finns; and to the east, with Mongols and Tungus. Through contact with their neighbors some Turkic groups lost all knowledge of their native language, but more often the Turks have assimilated alien groups into the family of Turkic-speaking peoples.

Deniker distinguished Turks from Mongols characterizing them as follows:—

> The Turkish race may be thus described: Stature above the average (1 m. 67–1 m. 68); head, hyper-brachycephalic (cephalic index on the living subject, 85 to 87); elongated oval face, non-Mongoloid eyes, but often with the external fold of eyelid; the pilous system moderately developed; broad cheek-bones, thick lips; straight, somewhat prominent nose; tendency to obesity.

The Mongols are thus described:—

> Nearly average stature (1 m. 63–64); head, sub-brachycephalic (cephalic index on the living subject, 83); black straight hair, pilous system little developed; the skin of a pale-yellow or brownish hue, prominent cheek-bones, thin straight flattened nose, Mongoloid eyes.[1]

However, recent investigators have expressed doubts as to the difference between these two types stating that the Turks and Mongols are branches of one racial stock.

N. L. Hecker, who studied the physical type of the Yakut, measured 417 men and 80 women. The measurements were made in 1894 in Yakutsk City and in the central part of the Yakutsk District. Forty measurements were taken on each individual, in accordance with Broca's and Bogdanov's instructions. Hecker soon left Yakutsk and while living in Irkutsk analyzed his material on 139 Yakut,[2] but included individuals whose blood relationship with Russians was known. Hecker also measured thirty Russian peasants of Amga Village who were however, three-quarter Yakut and Tungus.

On leaving Siberia for European Russia Hecker turned over his anthropometric material to I. I. Mainov. Mainov excluded from Hecker's Yakut thirty males whose relationship with Russians was

[1] Deniker, J., *The Races of Man: An Outline of Anthropology and Ethnography*. London, 1900. 377 and 379.

[2] Hecker, N. L., Contribution to the Characterization of the Physical Type of the Yakut (*Memoirs, East Siberian Division of the Imperial Russian Geographical Society*, vol. 3, part 1, Irkutsk, 1896, in Russian).

2: Jochelson E-5 (1884-1902) 1933 Yakut

● 141 known and added to the pure Yakut about 100 individuals whose measurements Hecker failed to analyze before publishing his paper. In that way Mainov obtained two groups: one, 207 adult Yakut, twenty to sixty years old; and two, thirty individuals of the same age, officially listed as Yakut, but with Russian ancestors on the side of one or the other of their parents. The former group cannot be regarded as pure Yakut, for three hundred years of contact of two peoples, neither of whom had any scruples as to sexual relations, undoubtedly had some influence on their physical type and each succeeding generation of both tribes inevitably became more and more mixed. Of the 237 adult Yakut measured by Hecker, thirty males (12.65 per cent) were able to indicate their Russian ancestry for the two or three preceding generations and eight men (3.37 per cent) a Tungus origin.

In addition to the two male groups, Mainov partly analyzed Hecker's measurements of sixty-two Yakut women sixteen to fifty-five years old and published these in the Russian Anthropological Journal.[1]

A political exile, F. J. Kon, in connection with the anthropometric measurements cited above, made special observations of pulse rate, respiration, body temperature, and other physiological and biological characters of the Yakut. The results of these observations, supplemented by observations by another political exile, Doctor A. A. Sipovich, were published by Kon in 1899 and, to date, this is the only reliable material on the physiology of the Yakut.[2]

During the winter of 1901–1902 Mrs. Jochelson measured women of the tribes of Northeastern Siberia, among whom were sixty-six Yakut on whom thirty-nine measurements were taken.

Vitashevsky measured forty-six men, sixteen women, and thirty-nine children (thirty-three boys and six girls). He did not publish these himself, but they were included by Professor A. A. Ivanovsky in the tables in his book, *Anthropological Composition of the Population of Russia* (In Russian).

Stature

Middendorff, whose measurements, as previously mentioned, were lost, gives 1600–1626 mm. for the stature of Yakut males. Maak gives the stature of Yakut men as 1480–1650 mm. The data on the stature of Yakut men, according to Mainov, Kon, and Vitashevsky, and of Yakut women (including those of Mrs. Jochelson), are summarized in the following table.

---

[1] Mainov, I. I., The Yakut (*Russian Anthropological Journal*, vol. 3, no. 4, pp. 35–62, St. Petersburg, 1902). (In Russian).

[2] Kon, F. J., *Physiological and Biological Data on the Yakut*, Minussinsk, 1899. (In Russian).

2: Jochelson E-5 (1884-1902) 1933 Yakut

STATURE
(In millimeters)

Males

Number	Minimum	Maximum	Difference	Average	Low (Below 1600)	Below Average (1601-1650)	Above average (1651-1700)	High and Upward (1701 and up)	Author
207	1406	1776	370	1624	71	57	49	30	Mainov
71	1405	1797	392		21	25	18	7	Kon
46	1435	1815	380	1607	22	10	9	5	Vitashevsky
324	1405	1815	410	1617	114	92	76	42	Total
				Females					
62	1384	1633	249	1512	2	42	10	8	Mainov
27	1329	1580	251		4	20	3		Kon
16	1374	1628	254	1498	2	10	1	3	Vitashevsky
105	1329	1633	304	1509	8	72	14	11	Total
61	1370	1630	260	1488					Mrs. Jochelson

HEAD LENGTH
(In millimeters)

Males

Number	Minimum	Maximum	Difference	Average	Small (Below 180)	Average (181-190)	Large (191 and up)	Author
207	172	208	36	191	11	87	109	Mainov
46	172	207	35	190	6	16	24	Vitashevsky
253	172	208	36	191	17	103	133	Total
				Females				
62	175	201	26	186	14	37	11	Mainov
16	163	195	32	179	6	9	1	Vitashevsky
78	163	201	38	186				Total
61	170	200	30	183				Mrs. Jochelson

141

2: Jochelson E-5 (1884-1902) 1933 Yakut

141

Head Length

While the cephalic index indicates the relation of the length to the width of head, and thus gives some idea of head form, the absolute length of head may give an idea of its size. The greater the length, the larger is the head. Therefore it will be of interest to give data on the length of head before that for the cephalic index.

Cephalic Index

141
144

From the table on the cephalic index we may observe that the mass of Yakut are brachycephals. If we compare the known average cephalic indices of the following Turkic and Mongoloid peoples, we may conclude that authentic Turks are broader headed than Mongols. From this the inference may be drawn that the moderate brachycephaly of the Yakut, may be ascribed to an admixture with non-Turkic, long-headed peoples. This contention may be supported by the fact that some Samoyedic, Yeniseian, Finnic, Iranic, and other tribes having become Turkicized and interbred with Turks have a smaller cephalic index than that of the genuine Turks.

Mongols	No.	Index	Turks	No.	Index
Kalmuck (Kuldja)	81	86.98	Kara-Kirghiz	66	86.17
Buryat	816	85.87	Kirghiz-Kaisak	374	87.10
Kalmuck	285	82.57	Kumyk	107	87.04
Khalka	36	81.88	Telengit		86.14
Torgout	103	84.73	Uzbeg	239	86.21
			Taranchi	306	86.46

The Sarts, having a cephalic index of 83.91, are regarded as a mixture of the original Iranian inhabitants of Central Asia, the Tadjiks, with their Turkic conquerors, the Uzbegs. While the Uzbegs have a cephalic index of 86.26, the Tadjiks also have a somewhat greater index (84.85) than the Sarts. This leads us to surmise that there must have been a third component in the Sart physical type.

The Tatars of Crimea have a cephalic index of 84.49; the Osmanli, 84.70; the Tatars of Kazan, 82.08; the Tatars of Caucasus, 83.49. Comparing these data with the measurements of Turks shown above we may infer that the Osmanli, Crimea, Kazan, and Caucasian Tatars are Turks mixed with non-Turkic elements, as is actually the case.

2: Jochelson E-5 (1884-1902) 1933 Yakut

CEPHALIC INDEX

Males

Number	Minimum	Maximum	Difference	Average	Dolichocephalic (Below 77.77)	Mesocephalic (77.78–80.00)	Brachycephalic (80.01–and up)	Author
207	71.72	94.79	23.07	82.66	22	26	159	Mainov
46	73.47	93.82	20.35	82.33	9	8	29	Vitashevsky
253	71.72	94.79	23.07	82.60	31	34	188	Total

Females

62	74.00	89.77	15.77	80.82	14	10	38	Mainov
15	76.92	80.01	12.09	82.94	2	2	11	Vitashevsky
77	74.00	89.77					49	Total
57	74.00	90.00	16.00	83.30				Mrs. Jochelson

141

6: Sauer--114 [2] G-5 (1785-94) 1802 Yakut
116, 141, 178, 511, 556

"*There is perhaps no* nation in the world that can exhibit a greater variety with regard to size. The affluent, whose dwellings are situated about the meadows on the south side of the Virchoyanski chain, are from five feet ten inches to six feet four inches high, well proportioned, extremely strong, and very active; while the indigent inhabitants of the more northern parts are in general below the middle size, indolent, and of an unhealthy complexion, evidently stunted by the badness of their food, the severity of the climate, and the want of proper cloathing. Their wealth consists in horses and horned cattle: The private property of no individual at this instant exceeds 2000, all species included; formerly, numbers of them possessed 20,000, according to their own testimony..."